Patient Satisfaction With An Interprofessional Approach to Wound Care in Qatar

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Patient Satisfaction With An Interprofessional Approach to Wound Care in Qatar

by

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Abstract

In general, patient satisfaction within health care services is an important indicator of the patients' confidence in the health care system and a significant indicator of the quality of health care services delivered. In this study, I have measured the level of patient satisfaction wound care service delivery at the Hamad General Hospital Outpatient Wound Clinic in Doha, Qatar.

To complete this research I conducted a cross sectional study design to survey patients who received wound care services from a interprofessional team from January 2015 to February 2016. Through this data collection method I solicited these patient’s opinions on the service they received through the interprofessional approach. A total of 111 respondents completed a Client Satisfaction questionnaire (Attkisson, 1983), modified to include questions on socio-demographic characteristics. Data collection was completed from December 2015 to February 2016.

Overall, results from this study showed that patients were generally satisfied with wound care services delivered by a interprofessional team, as assessed by the client satisfaction questionnaire. The results revealed favorable ratings of satisfaction ranging from 67.9% to 90.1%. These results indicate that the approach by which services are provided through an interprofessional approach which brings together professionals from various departments, has a positive impact on the patients’ satisfaction with care received.
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List of Abbreviations

AHS: Academic Health System

CHREB: Conjoint Health Research Ethics Board

CSQ – Cxlient Satisfaction Questionnaire

DON: Director of Nursing

HGH: Hamad General Hospital

HMC: Hamad Medical Corporation

IPC: Interprofessional Collaboration

IPE: Interprofessional Education

SCH: Supreme Council of Health

OPD: Outpatient Department

PROMS: Patient Reported Outcomes

PROMS: Patient Reported Outcome Measurement

QNV: Qatar national vision
Chapter 1: Introduction

This chapter introduces the importance of interprofessional practice in health care delivery. It provides the rationale for measuring patient satisfaction with an interprofessional health care delivery approach, and describes the rationale for conducting this patient satisfaction study with wound care services that uses such an approach.

Preface

Patient centred care is the main goal in many areas of healthcare services, and measuring satisfaction is important to improve quality of care. There is variable literature that documents patient satisfaction with health care services. However, little is known about an interprofessional approach to wound care, and whether this delivery method has an effect on patient satisfaction. In this study patient satisfaction was measured from patients who had received wound care services from an interprofessional team of health care providers. Interprofessional team refers to the various health care providers who come together to serve patients in need. The patients who participated in this study were aged 18 years old and had received wound care treatment in the Wound Care Service (WCS) at Outpatient department (OPD) in Hamad General Hospital (HGH) from January 2015 to March 2016. Patient satisfaction data were collected through face to face interviews.

The results of this study will provide an understanding of patient concerns, if any, about wound care services, and whether providing services at a central location, as it is currently organized, is making a difference to their care.
Background

Qatar is witnessing an exponential growth in population and infrastructure. This is mostly related to the influx of expatriate workers to fill the many job opportunities in the construction, services, and health care sectors. Faced with the challenge to meet the health care needs of a growing population, Qatar’s health care system is undergoing tremendous transformation and modernization in terms of buildings, equipment, medical procedures, staff recruitment, training and professional development (AHS, 2014). This transformation, led by the Supreme Council of Health (SCH) aims to provide high quality health care of international standards in accordance with Qatar's National Vision (QNV) 2030 which is considered the framework of Qatar's future development.

In 2010, road traffic accidents were among the top two causes of death in Qatar (Bener et al., 2012). According to Bener (2012), prevalence rates were highest (35%) among men aged 25-34 years old compared to female. Due to the demand for wound care service as a result of injury, Hamad General Hospital (HGH) re-organized its health care services to meet this demand by creating a wound care unit (in formant from HGH). The delivery of wound care is well established within HGH from an in-patient and outpatient perspective. HGH uses a multi-disciplinary approach to wound care management, comprising of three separate departments that work together as a multidisciplinary team, including clinical and non-clinical staff.

Within in-patient services, a Clinical Nurse Specialist, five subspecialty wound care nurses, and a link nurse, operate under the leadership of a Director of Nursing (DON). In the out-patient area an entire multidisciplinary wound care team is led by a DON. As well, a patient and family educational unit, comprised of five wound care nurses, delivers services in this area.
The type of wounds that patients present in both in-patient and out-patient areas can be categorized as skin tears, diabetic foot ulcers, surgical wounds, and burns (informant from HGH). Working collaboratively, the purpose of wound care nursing is to prevent injury to the skin and underlying tissues and to facilitate the healing of wounds. Ousey et al (2014) describes wound care as encompassing advanced clinical practice, strategic management, research, education and multidisciplinary team work enhances the quality of life for patients. From the perspective of interprofessional collaboration through a multidisciplinary team, providing wound care means working collectively to achieve clinical wound management, of simple to complex and chronic wounds, providing staff and patient education on skin integrity and wound management, and finally, providing evaluation of and support for the services that are provided to patients.

Providing such high quality wound care requires that health care workers work effectively with their colleagues across other disciplines. This is often referred to as interprofessional collaboration (IPC). There is evidence to support that employing a multidisciplinary team strategy in health care can lead to improved outcomes for patients (Gottrup, 2004; Crutchner et al., 2004; Barcelo et al., 2010; Capella, Smith, Philip, & Putnam, 2010; Strasser et al., 2008). One study that examined the outcomes of IPC (Reeves, Goldman & Oandasan, 2007) found that interprofessional team work decreases medical errors, improves patient satisfaction and patient care, and improves the knowledge and skills of professionals.

This proposed study will investigate patient satisfaction with an interprofessional approach to wound care management in the OPD at HGH. This evaluation is a necessary step to assess, from the view point of patients, how well the service is performing since its implementation.
Chapter 2: Literature Review

This chapter is divided into five main sections: 1) Interprofessional Practice, 2) Interprofessional practice in wound care, 3) Patient satisfaction, 4) Patient satisfaction with Interprofessional Practice and 5) Interprofessional Education as Preparation for Interprofessional Practice. A summary of the literature concludes the chapter and identifies the gaps in the literature that will be addressed through conducting this research study.

2.1 Interprofessional Practice

Much has been written about Interprofessional Practice in the health care literature. According to Green & Johnson (2015), collaborative practice in healthcare happens when several health workers from different professional backgrounds provide comprehensive patient care. Collaborative practice is accomplished through working collaboratively with patients, their families and their communities to deliver the highest quality of care across various health care settings. Green and Johnson (2015) further explain that IPC occurs when individuals from two or more professionals work together to achieve a common health goal for the patient. This approach helps the caregivers to achieve more patient outcomes than what would be possible should they approach this patient care individually. Interprofessional practice also helps healthcare professionals to serve a large number of people. As such, in the past 15 years, interprofessional practice has gained more support as a means to improve the delivery of patient care.

Herbert (2005) refers to interprofessional practice as collaborative patient centered practice. According to this author, collaborative patient-centered practice refers to the continuous interaction between two or more health professionals or disciplines, that occurs for the purpose of solving a patient health concern. This collaborative practice occurs with the participation of the patient, and it ensures that there is participation from
each discipline involved in patient care. Herbert (2005) further explains that collaborative practice is a way for health care professionals to work together and as well as work with their patients.

Bridges, Davidson, Odegard, Maki, & Tomkowiak (2011) state that, according to the Canadian Interprofessional Health Collaborative, interprofessional collaboration is a partnership that happens between a team of health providers and a patient. This partnership is formed in a participatory, collaborative and coordinated approach. The result is shared decision making from all partners used to address health and social issues faced by patients in health care.

Zwarenstein, Goldman & Reeves (2009) refer to interprofessional practice as IPC. These authors define IPC as the process through which different professional groups work together to positively impact the health care delivered to patients. They further argue that in addition to improved patient outcomes, IPC helps to improve work interactions among the health care workers themselves, and the different processes in the health care sector. This is due to the fact that IPC involves negotiating agreements among different health care professionals, and as such, values these communication skills and the individual contributions each health care professional brings to patient care.

Green & Johnson (2015), describe interprofessional practice as a collaboration that involves the integration of health care providers with different talents. This includes not only medical professionals, but also other professionals who may help to improve the standard of health care delivered to patients. These authors argue that in order to achieve interprofessional collaboration, it is very important for the people involved in patient care to be open minded and respectful of the knowledge and skill of the other health care providers. In their experience, interprofessional practice can address some of
the issues facing health care. For example, staff shortages in primary health care and the difficulties faced in managing chronic and complex diseases provide very good opportunities for health care professionals in bringing specific skills into collaborative environments.

Herbert (2005), addresses some of the benefits of interprofessional practice. This author also refers to interprofessional practice as IPC. According to this author, IPC enhances both patient and family centred health care through addressing the goals and values of the patient. IPC also helps to improve continuous communication among healthcare providers, and works to optimize all healthcare provider participation in clinical decision making.

According to Martin, Ummenhofer, Manser, & Spirig (2010), a lack of interprofessional collaboration among health care workers can lead to a negative impact on the provision of healthcare. This negative impact on the delivery of healthcare can then lead to poor patient outcomes. According to these authors, in order for healthcare professionals to be able to provide effective collaboration, there should be equal division of power, and authority among the providers. There should also be trust and mutual respect among the providers. The authors argue that a single health care worker cannot meet the needs of complex patient care, and as such, improved interprofessional collaboration is essential into the health care sector. IPC is an essential service for facilitating information flow and for the provision of health care, as a single health care provider can no longer meet all of a complex patient’s needs.

Zwarenstein, Goldman & Reeves (2009) explain that when health care providers work together in interprofessional practice, they can influence the quality of care provided. Without interprofessional practice, there can be a lack of communication between health care providers and as such, problems in patient care delivery can occur.
D'Amour, Ferrada-Videla, San Martin Rodriguez, & Beaulieu (2005) also refer to interprofessional practice as Interprofessional collaboration (IPC). According to these authors IPC is a very important factor in improving the effectiveness of the health services provided to the public. However, they also acknowledge that healthcare providers still have limited knowledge about the complexities of IPC. In order for IPC to be effective as a mechanism to improve patient outcomes, it is essential for health care providers to learn and understand the idea of effective collaboration.

Bainbridge et al. (2010) explain that interprofessional practice is widely accepted as a method for providing cost-effective patient treatment, and for improving patient outcomes in healthcare delivery. These authors remind the readers that medical professionals should be able to work together in interprofessional teams to ensure health care providers provide consistent and reliable care to patients. Such collaboration is very important in being able to provide quality healthcare. In these successful collaborations, team work is the main context in which collaborative patient-centered care is provided. The authors continue to explain how the health care environment is facing various issues such as patient safety, staff shortages, and populations of patients with increasingly complex health care needs. Healthcare professionals must be able to work collaboratively as a group of professions to provide consistent, continuous, and reliable care.

Gagliardi, Dobrow, & Wright (2011) explain that interprofessional practice among health care workers improves both clinical and patient reported outcomes for those with acute and chronic conditions. Such interprofessional practice required collective decision making among various healthcare professionals. However, these authors also acknowledge that there are various challenges in achieving an interprofessional collaboration, and as such initiatives must be developed to promote interprofessional
collaboration in daily professional life. They argue that research studies have shown that IPC as an approach to healthcare delivery has reduced the length of stay for patients per admission, reduced the costs per admission, reduced complications and readmissions, increased patient and family satisfaction with care delivered, increased job satisfaction of multidisciplinary staff, and increased case manager collaboration. High intensity of IPC has also been associated with high rates of patient satisfaction.

Bridges, Davidson, Odegard, Maki, & Tomkowiak (2011) argue that patients have complex health needs, and require more than one discipline to address their healthcare issues. Healthcare professionals working in interprofessional teams can be useful in addressing these complex patient needs. An IPC approach to patient care can allow sharing of the expertise of professionals. Such sharing of ideas to form a common goal of restoring or maintaining a patient’s health concern, can improve outcomes while combining professional resources.

In the literature, the term interprofessional practice and interprofessional collaboration are used interchangeably. However, it is clear through this exploration of both terms that interprofessional practice and interprofessional collaboration require professionals using a collaborative approach to address patient health concerns. In order for this approach to healthcare delivery to be successful, shared decision making, mutual respect for the knowledge and skills of the providers and open communication are essential. It is clear, however, that such healthcare delivery can be an effective and rewarding approach in addressing the complex healthcare concerns of patients.

2.2 Interprofessional practice in wound care

2.2.1 What is known

Moore, Corbett, & McGuiness, (2014) argue that the growing prevalence and incidence of non healing acute and chronic wounds is a major concern. As well, the lack
of united services aimed at addressing the complex needs of individuals with wounds is a major challenge. According to these authors, interprofessional collaboration in education and practice is very important in being able to provide the best patient care, enhance clinical and health-related outcomes and strengthen the health care system. However, the biggest challenges in wound care are the lack of united services aimed at addressing all the health care needs identified by individuals with wounds. Moore, Corbett, & McGuiness,(2014) also argue that a review and analysis of 18 years of literature related to managing wounds as a team showed increasing evidence to support a collaborative team approach in wound care.

According to Friman, Klang, &Ebbeskog (2010), various studies have shown the importance of interprofessional cooperation for the treatment of wounds. They further explain that while interprofessional collaboration may reduce prevalence of wounds, it also increases the efficiency in the treatment of wounds. Therefore, interprofessional collaboration between health care providers should be encouraged as it facilitates appropriate assessment, diagnostic investigations, treatments and care for the patients with wounds.

Sibbald, Orsted, Coutts, &Keast (2007) explain that wound healing can be a complex process, and as such, patients with chronic ulcers require a systematic, team approach from healthcare professionals. These authors argue that the wound care team members may vary based on the individual patient’s requirements. The interdisciplinary team therefore has to work both with the patients and their families to address the complex treatment requirements of patients with chronic wounds. Through this approach the healthcare professionals can positively influence healing of the chronic wounds by promoting, collaborating and participating in interdisciplinary care teams.
According to Sendelbach, Zink, & Peterson, (2011), interprofessional collaboration is very important for preventing pressure ulcers. As such, collaboration with interprofessional teams has been identified as one of the most commonly reported facilitators in the implementation of evidence-based guidelines for wound care. Therefore, interprofessional collaboration as an approach to wound care is necessary for translating research into practice. These authors also explain that in order to prevent pressure ulcers, healthcare providers need consistent, vigilant, and interprofessional approaches. Accordingly, interprofessional workgroups, evidence-based approaches and system-level support will result in a decreased number of pressure ulcers in patients overall.

Abrahamyan, Wong, Pham, Trubiani, Carcone, Mitsakakis, & Krahn (2015) explain that a multidisciplinary structure of the healthcare team is one of the most important components of wound care. This approach would enable healthcare professionals to provide patient care, and work with others to provide the best possible patient care. These authors also suggest that a multidisciplinary team approach has become an essential component of evidence-based management for both inpatient and outpatient cases of chronic wounds. Such a multidisciplinary team approach aims to combine the important disciplines that contribute to wound healing and to provide a holistic service to patients with multiple needs. This is accomplished through applying the best available evidence-based care. According to these authors many studies have shown that a multidisciplinary team approach results in improved wound healing rates and reduced amputation rates, reduced length of hospital stay, reduced number of home visits and a reduction in the incidence of pressure ulcers, thereby reducing the overall cost of care.
Gottrup (2004) argues that the idea of multidisciplinary teams has become very important in providing wound care. Multidisciplinary wound care collaborations have resulted in a reduction of required home visits, and the range of products used in treating wounds. This author also stresses the importance of the team approach and collaboration between all health care professionals to facilitate high quality holistic care for the patient with wounds.

A study by Moore, Corbett, & McGuiness, (2014), found that adopting an interprofessional approach to the provision of wound management services seems logical, however, there is a lack of clarity within the literature surrounding the terms multidisciplinary, interdisciplinary and transdisciplinary. As a result of lack of consensus on terminology, healthcare providers are confused as to what this approach to wound care means.

Patient satisfaction is a key indicator for healthcare quality and for so many years a measure of health outcomes. The main aim of measuring consumer perception of quality of healthcare services is to utilize these measures to enhance and improve the delivery of care and in the last 40 years, the many instruments used to measure patient satisfaction have evolved (Dockins, Abuzahrieh, & Stack, 2015). According to Oetzel, Wilcox, Avila, Hill, Archiopoli, & Ginossar (2015) “patient satisfaction is an individual’s perception and evaluation of the care they receive in a health-care setting” (p.972). They also mention that it is very important to understand patient satisfaction because of its association with retention to care and medication adherence, which will in turn impact the health and quality of life of the patients. Patient satisfaction is an important component of patient-centered care, which aims at improving health outcomes by reducing the gaps between patient perceptions and health care needs (Wiebe, Fiest, Dykeman, Liu, Jette, Patten, & Wiebe, 2014).
According to Lloyd, Jenkinson, Hadi, Gibbons, & Fitzpatrick, 2014, the importance of measuring Patient Reported Outcomes (PROs) in healthcare is now widely accepted, and complements the data collected by clinical observation, or by the assessment of a particular pathophysiological process. They also explain that patient reported outcome measures (PROMs) are particularly very useful and important for measuring the quality of medical or hospital care that patients receive. Patient ratings of improvements or outcomes of treatment are usually collected by out patients’ perceptions as part of an investigation of satisfaction with the care provided by health care professionals.

2.2.2 What remains unknown? Gaps in the literature

The existing literature on Interprofessional collaboration strongly suggests that integration of health care providers with different talents and including other professionals help to improve the standard of health care delivered to patients. There is evidence in the literature about the importance of IPC in health care. The literature also suggests that patient satisfaction which is an important predictor of health care service quality is influenced by IPC. However, literature that discussed patient satisfaction in wound care with IPC was not found. Also literature about patient satisfaction and IPC in Qatar was not found. This proposed study will begin to fill the gap in the literature.

2.3 Patient satisfaction

Patient satisfaction is a very important part of health care services quality improvement and patient-centred care. It is also an indicator of the patients' confidence in the health care system (Mathews, Ryan, & Bulman, 2015). Patient satisfaction is a significant indicator of quality in health care delivery by all health care professionals. Patient satisfaction results also provide health care providers with valuable information about how much a patient’s needs and expectations are being met. These results also provide health care practitioners with information regarding the quality of care provided
by the entire healthcare team working with a hospital. Patient satisfaction is emerging as a very important tool for health care providers as a way to show patient focus and differentiation in the health care community. As such, patient satisfaction results are used to enhance a positive patient experience (Gupta, Patel, & Lis, 2015).

The quality of health care provider services can be assessed through multiple perspectives; such as those of doctors, nurses, allied health workers, the patients themselves and health care insurers. However, patients' perspectives should be considered to be the most important evaluation of the quality of care provided. Patient satisfaction as well as their opinions and suggestions, can affect the future behaviours of health care providers related to the treatment outcomes. By analysing patients’ subjective feedback, health care providers can fully understand the areas which need improvement. Such analysis completed by the health care providers can in turn improve the quality of care delivered (Wiebe, Fiest, Dykeman, Liu, Jette, Patten, & Wiebe, 2014).

Patient satisfaction surveys are valid tools for assessing the quality of health care services (Thurairatnam, R. R., Mathew, G. S., Montgomery, J., & Stocker, M. (2014). They are important outcome measures, and often refer to the patients’ subjective view of various aspects of health care, such as available resources and the staff’s availability to function within the health care organization.

Abusalem, Myers, & Aljeesh (2013) argue that patient satisfaction is one of the most widely used outcome indicators to measure the quality of health care delivered. These authors further explain that patient satisfaction is a multidimensional concept and is being described as having elements of subjectivity, expectations and perceptions from the patients themselves. According to these authors, patient satisfaction is a complex mixture of perceived need, expectations of care and the experience of care. They also
argue that patient satisfaction can be a predictor of any patient’s behaviours. The authors further explain that the concept of patient satisfaction was developed in 1957 by Adbellah and Levine. It was not until the early 1980’s that hospitals started using patient satisfaction information as an outcome measure of health care delivery. Furthermore, in the early 1990’s, patient satisfaction became one of the most important outcomes of patient care delivery by health care providers.

Patient satisfaction can be measured by using various data collection tools such as surveys and questionnaires. Various factors including patient accessibility and the convenience of being able to access patient information are taken into consideration when determining the data collection method. It is well known that actors such as the institutional structures of the health care organization, interpersonal relationships formed with the patients, competence of health professionals and patient expectations and preferences all contribute to patient satisfaction (Gebremedhn, Chekol, Amberbir, & Flatie, 2015).

Boquiren, Hack, Beaver, & Williamson (2015) explain that patient satisfaction measures are also fundamental barometers of the perceived quality of healthcare by patients, and are used in program evaluation and improvement, and treatment quality monitoring and assurance. These authors argue that patient satisfaction is one fundamental building block to the establishment of a long-term relationship between a patient and a specific healthcare provider.

2.4 Patient satisfaction with interprofessional Practice

Gagliardi, Dobrow, & Wright (2011) explain how research studies have shown the benefits to both patients and health care organizations through the application of Interprofessional Practice, as a care delivery model. Through the use of Interprofessional Practice, patients’ length of stay per admission has been reduced, the
costs per patient admission have been reduced, and complications that result in the readmissions of patients have also been reduced. Additionally, studies have documented increased patient and family satisfaction, increased job satisfaction of the multidisciplinary staff, and increased case manager collaboration. Most significantly, the high use of Interprofessional Practice and a health care delivery model has also been associated with high rates of patient satisfaction.

Interprofessional Practice promotes collaboration among healthcare professionals in providing quality healthcare. Mary Beth, Pek Hong, & Pandi (2015) argue that by promoting interprofessional collaboration, Interprofessional Practice works to improve patient safety, augment patient satisfaction, and also increase the levels of innovation in patient care delivery. Streeton (2016) explains that multidisciplinary interprofessional teams work to improve nurse perceptions of teamwork with physicians and other medical professionals, and as such, nurses feel more comfortable in providing feedback to the physicians. Interprofessional Practice yields positive patient satisfaction survey results, and more constructive, meaningful daily nurse-physician interactions.

In a study by Bryant, Reeves, & Zwarenstein (2003), results also showed that Interprofessional Practice as a method of health care delivery improved interprofessional collaboration and thereby improved inpatient care and patient satisfaction. Further research has shown that effective interprofessional communication and collaboration can positively influence patient satisfaction and outcomes (Sargeant, MacLeod, & Murray, 2011). Additional studies have shown that health care delivered through interprofessional teams working together, improves the quality of the care delivered, positive patient outcomes, increased patient satisfaction with the care received, efficiency of the services delivered, and job satisfaction (McNelis, Horton-Deutsch, & Lay, 2015).
Vander Wielen, Do, Diallo, LaCoe, Nguyen, Parikh, & Dow (2014) explained that most of the healthcare professionals are educated and trained in an unprofessional way; without any interdisciplinary collaboration and when these students later work as healthcare professionals then they are expected to work collaboratively and to work in teams. They also explain that at this stage problems arise as healthcare providers are merely working side-by-side instead of effectively collaborating and communicating as a result of the lack of teamwork, patient care can be impacted.

2.5 Interprofessional Education as Preparation for Interprofessional Practice

McNair, Stone, Sims, & Curtis, (2005) state that IPE offers the best environment for learning about teamwork and interprofessional collaboration. According to the authors, IPE as a method of curriculum delivery, takes students beyond the uniprofessional experience into a multiprofessional experience that more resembles a health care environment (McNair, Stone, Sims, & Curtis, 2005). Pockett (2010) explains that IPE teaches students from a variety of health care disciplines how to work with other professionals for the benefit of clients and services. This author further argues that IPE is very important to achieve improved healthcare outcomes for patients. Pockett also explains that the literature on IPE suggests that the educational theories that underpin IPE can be connected to adult learning theory, reflective practitioner theory, social psychology theory, group work theory, and biopsychosocial theories.

Forte, & Fowler, (2009) argue that team work is very important for the delivery of effective health care services, and that IPE is a very important approach to overcome the difficulties in communication and team work within health care sector. IPE can also help to change attitudes and dismiss the stereotypes that exist between different groups of health care providers by increasing their knowledge and understanding of each other as professionals. Forte, & Fowler (2009) states that IPE can be defined as “Occasions
when two or more professions learn from and about each other to improve collaboration and quality of care” (p. 58). As such, the main purposes of IPE are to break down stereotypes, build collaboration and teamwork, and thereby positively impact the patient experience.

2.6 Summary of literature review

Patient satisfaction is an indicator of quality of care and has been extensively used to investigate patient outcomes and improve health services in various hospital settings. Numerous tools have been developed to assess patient satisfaction with health care delivery, often in inpatient settings. High intensity use of interprofessional practice has also been associated with high rates of patient satisfaction. Interprofessional education is needed so health care professionals learn to work together. Such an understanding of the importance of Interprofessional Practice will lead to improved interprofessional collaboration, and ultimately improved inpatient care and patient satisfaction with care received.

According to Herbert (2005), collaborative patient-centered practice means continuous interaction between two or more health professionals or disciplines for solving a problem with the participation of the patient and it ensures that there is participation of each discipline in patient care (p.2). Bainbridge et al. (2010) explains that interprofessional collaboration is widely accepted as a method for providing cost effective treatment and in improving patient outcomes in the health care sector. As a consequence, medical professionals should be able to work together in interprofessional teams to make sure that we are able to provide consistent and reliable care for our patients (p. 6).

Gagliardi, Dobrow, & Wright (2011) explain that interprofessional collaboration among health care workers improves both clinical and patient reported outcomes for
acute and chronic conditions. However, they also mention that there are various challenges in achieving an interprofessional collaboration and hence we need initiatives to develop and promote the interprofessional collaboration in our daily professional life (p. 147).

Martin, Ummenkofer, Manser, & Spirig (2010) state that lack of interprofessional collaboration among health care workers can lead to negative impact on providing health care and patient outcomes. According to the authors, for collaboration to be effective, there should be equal division of power, and authority and there should be trust and mutual respect between the subjects. Now a days a single health care worker cannot meet the needs of a patient, hence improved interprofessional collaboration is essential in health care sector (p. 2-7).

According to Green & Johnson (2015), interprofessional collaboration involves integration of people with different talents not only medical professionals but also other people who may help in improving health care standards. In order to achieve interprofessional collaboration it is very important for the people involved to be open minded and also to respect other members (p. 4).

Zwarenstein, Goldman & Reeves (2009) explains that “Interprofessional collaboration (IPC) is the process in which different professional groups work together to positively impact health care” (p.20). According to D'Amour, Ferrada-Videla, San Martin Rodriguez, & Beaulieu (2005). IPC is a very important factor in improving the effectiveness of the health services provided to the public. They also state that we still have limited knowledge about the complexities of IPC and it is very important for us to understand the idea of collaboration very well(p.116).

Despite available literature on patient satisfaction in many areas of patient care, this author found none particularly related to wound care. Specifically, none in relation to
wound care delivered through an interprofessional approach. This gap in the literature justifies the reason why this author proposes to study patient satisfaction with a multidisciplinary team approach at HMC. Such information could attempt to fill this knowledge gap in Qatar and the greater Middle East area where little is known about patient satisfaction in relation to an interprofessional approach to wound care management.

IPE is able health professionals from various disciplines learning how to work with each other to improve health care delivery. Such collaboration will be of benefit to the patients and the health care agency. IPE is therefore very important for improved healthcare outcomes. The main purpose of IPE is to help health care professionals break down stereotypes, build collaboration within the team, and thereby positively impact the patient experience.

2.7 Objectives and Research Questions

The main research question that was addressed in this study was, What is the level of patient satisfaction with the coordination of services offered through an interprofessional wound care approach?

The overall objective of this research study was to determine the level of patient satisfaction with an interprofessional approach to wound care management.

The specific objectives are:

1) Assess patient satisfaction with the intake / referral process
2) Determine patient satisfaction with coordination of wound care services in the out-patient wound care clinic
3) Determine patient satisfaction with educational materials provided to patients for wound care management
2.8 Framework for measuring patient satisfaction

Various approaches have been used to measure patient satisfaction. In this study, the author has chosen to adopt a framework that measures satisfaction from the time a patient walks into the wound care clinic to the time when they leave. Therefore, the study will attempt to measure satisfaction with all aspects of wound care including patient referral and intake process, quality of wound care service received, and overall satisfactions with services in general. This framework for measuring service user satisfaction has been used in other studies in health care including client satisfaction in psychotherapy (Gaston, 1992), care giver satisfaction with support services (Savard, 2006), to name a few.

At a time when the world is facing a shortage of healthcare professionals, health organizations are looking for innovative ways that can help policy makers develop programs and policies to boost the health workforce. In its 2010 report, Framework for Action on Interprofessional Education and Collaborative Practice, the World health Organization strongly encourages efforts to develop and integrate interprofessional education and practice into healthcare organizations. This framework highlights the current status of interprofessional collaboration around the world (World Health Organization, 2010).

Figure 1, Health and Education Systems, identify the mechanisms that shape successful collaboration around the world, and most relevant to this thesis, describes an interprofessional practice in terms of improved health outcomes for patients. The goal of this visual is to encourage healthcare organizations to implement the elements of interprofessional education and collaborative practice that will be most beneficial to patient care in their jurisdiction.
Figure 1. Health and Education Systems (Source: World Health Organization, 2010)
Chapter 3: Methods

This chapter begins with a discussion of the theoretical model that was used to guide the research. This is followed by a discussion of the methods used to conduct the study. This chapter focuses on the method employed in this study. A description of the research design, sampling procedures, participant recruitment, data collection and the data analysis approaches is provided.

3.1 Theoretical Model

This study was conducted at a time when Qatar has adopted an interprofessional Health Care Education (IPE) program to help improve collaborative healthcare delivery in the State. To achieve this objective, Qatar has begun funding IPE projects, one of which is “Implementing Inter-professional Undergraduate Health Care Education in Qatar, NPRP: 4-693-3197 (Johnson, 2016). The investigators on this project identify two areas where the implementation of IPE can be beneficial to the state of Qatar including (1) pre-licensure, in education – conducted with students in training at a post secondary education; or (2) post-licensure, in practice, provided to working professionals as continuing professional development (Johnson, 2016). This study can be placed under the second scenario as patient satisfaction is assessed “post-licensure” in a hospital environment.

A pyramid model developed by Johnson (2016) is useful for understanding the role of IPE in health care delivery and was used to guide this study. According to the model, three levels of core competencies can be distinguished as follows: IPE (team level), common (individual level), and discipline specific level (Figure 2).
The model identifies four IPE shared core competency domains, including role clarification, interprofessional communication, patient and family centred-care and shared decision making (Johnson, 2016). To facilitate understanding, each domain is defined and specific, measurable competencies are attributed. For example, the “role clarification” domain is defined as “Healthcare students/professionals understand and respect the role and responsibility of all stakeholders” (p.6). Specific competencies attributed include 1.”Demonstrates through application an understanding or their own role; 2. Understands scopes of professional practice and the roles of each member of the healthcare team; 3. Demonstrates respect for other healthcare professionals roles and responsibilities” (p. 6). Details of the pyramid model of IPE shared core poetencies have been described elsewhere (Johnson, 2016).

In this study, where applicable, we explored this model to provide and understanding of client satisfaction with an interprofessional approach to wound care services at Hamad General Hospital in Qatar. This is important to show how such a model can be put to practice.
3.2 Design and Setting

To complete this research, cross sectional research design was chosen. Patients who received wound care services from an interprofessional team between January 2015 and March 2016 in the outpatient wound care clinic at Hamad General Hospital in Doha, Qatar, were asked to participate in the study (see Appendix I for timeline). These patients were surveyed to determine their level of satisfaction with the wound care services received as they were delivered through an interprofessional team approach.

Hamad General Hospital, located in Doha, Qatar is a 600 bed inpatient adult tertiary hospital that receives and treats about 40,000 patients annually. Of this large number of patients seen, 30% are admitted. The rest is treated as outpatients and discharged. In 2014, a total of 165 patients came to the Hamad General Hospital outpatient clinic to receive wound care services. This number was confirmed through the outpatient clinic patient registry.

As the wound care service maintains a service user registry of all patients treated in the outpatient wound care clinic for planning purposes, this registry was the ideal place to obtain contact information for potential participants for the research study. After obtaining consent from ethical boards and prior to starting the research, a letter asking permission to conduct the study, accompanied by a summary of the study protocols, was sent to the executives in charge at the outpatient wound clinic. The letter (see Appendix II) specifically requested permission to access the Hamad General Hospital Wound Care Clinic patient registry for recruitment purposes. A meeting was then held with the executives to further explain the purpose of the study and to answer questions regarding the research.
3.3 Ethical Approvals

Prior to starting this research, ethical approval was first sought from the University of Calgary Conjoint Health Research Ethics Board (CHREB). A later amendment was sought from the CHREB requesting that patient recruitment be done retrospectively through the wound care out-patient registry rather than asking patients to participate as they receive care at the clinic. This amendment was approved and the change was made to the research protocol and the ethics certificate was received (see Appendix III). Ethical approval was then submitted to the Hamad General Hospital ethics board and approval was received shortly afterwards (see Appendix IV). Once both these ethical approvals were received, participate recruitment began on December 20th 2015.

3.4 Study Population

The study sample for this research was one of convenience. The purposive sample included all patients who have accessed wound care services from an interprofessional team approach at the Outpatient Wound Care Clinic at Hamad General Hospital between the time period of January 2015 to March 2016. According to the patient registry at the Out Patient Wound Care Clinic, the complete patient sample of convenience could be as many as over 200 patients who have been treated at the clinic over this one year time period. The goal for sampling was to have as large a sample as possible for this data collection period. Larger samples increase sampling power and lead to more precise estimates during analysis (Wislon, VanVoorhis, & Morgan, 2007). As such, this was the goal of this study.

Access to patient registry to obtain contact information for this patients treated during the set time frame was coordinated through the head nurse for wound care at the Out Patient Clinic. Patients from the registry were called and asked if they would be
willing to return to the wound care clinic to participate in a follow up survey. Often the patients returned for treatment and the time of the survey was coordinated around the treatment times. When patients returned to the clinic, the researcher met with each patient to explain the purpose of the research and to invite the patient to participate in the study. An information letter about the study was provided (see Appendix V). The approval letter written by the Wound Care Outpatient Clinic executive to conduct the study at Hamad General Hospital was presented (See Appendix IV). The ethical approval certificates from both Hamad General Hospital and the University of Calgary were also available for presentation.

Participants were invited to participate in the study and it was made clear that their participation was voluntary. They were also informed that they could drop out of the study at any time without penalty.

3.5 Inclusion / exclusion criteria

The target population for this study included all patients who were 18 years or older and who received wound care services at least once in the Outpatient Wound Care Clinic at Hamad General Hospital between January 2015 and March 2016. Patients were required to speak and understand English as the survey was conducted in the English language. Patients who were unwilling or unable to participate, who were under 18 years of age and who did not have the required English language skills were excluded from the study.

3.6 Survey Instrument

Patient satisfaction was assessed using a Client Satisfaction questionnaire (CSQ-8) (Attkisson & Greenfield, 2004), (See Appendix VI). Permission was obtained from the developer to use the questionnaire (See Appendix VII). The questionnaire has been used to measure satisfaction in numerous studies some of which include satisfaction with
childbirth-related care among Filipino women (Matsubara et al, 2013), satisfaction with hospital psychiatry services (Smith et al, 2014), client satisfaction with psychotherapy (Gaston & Sabourin, 1992), caregiver satisfaction with support services (Savard, 2006). The CSQ-8 has a known reliability factor as measured by Cronbach’s alpha coefficients, ranging from 0.83-0.93 (Attkisson & Greenfield, 1996; Nguyen et al, 1983) and a validity factor of 0.8 on average; a significant correlation with other instruments measuring satisfaction (De Wilde & Hendricks, 2005). Additional questions were added to gather background information about patients including causes of wound, referral sources and socio-demographic characteristics (See Appendix VI).

3.7 Data Collection

Data collection was completed over a period of 3 months from December 2015 to March 2016. The Client Satisfaction (CSQ-8) questionnaire was administered through face-to-face interviews with each participant who agreed to participate in the study. The questionnaire was completed under the direction of the research in a private room at the Wound Outpatient Clinic at Hamad General Hospital. The questionnaire was presented in the English language. Eligible participants were scheduled for a set time to come and complete the survey during clinic hours. If the participants were scheduled to receive wound care services, the time to complete the questionnaire was coordinated with this time. Three wound care nurses and a head nurse assisted in scheduling the participants. The researcher conducted the survey as she ensured the standard process of the actual gathering of factual information was consistent.

Completing the questionnaires started on 20th December 2015 as planned. Patients who received wound care treatments were asked to voluntarily participate in the study. After obtaining a signed consent (See Appendix VIII), participants were provided with clear instructions on how to complete the CSQ-8 questionnaire. In addition, a private
room was provided for the participants to complete the questionnaire, and as such, a quiet and calm environment was maintained. The research was available to assist the participants who needed interpretation of the questions or who had questions about the questionnaire.

It became very obvious at the beginning of data collection that only soliciting patients who came to the clinic for wound care services would not provide a sufficient sample group. It was observed that there was a very small number of current patients and the target population would not be achieved. The decision was immediately made to complete the data collection retrospectively from patients who had already received health care services at the clinic. As such, the researcher sought approval from the ethics boards to modify the data collection protocol and received approval on 25th of December 2015. Patients who had received health care services from the Outpatient Wound Care Clinic at Hamad General Hospital between the time period January to December 2015 were then recruited into the study. The patient contact information was traced from the clinic registry. These patients were screened for eligibility and invited to participate in the study. Upon agreement to participate, a time was established for the participant to come to the clinic to complete the questionnaire. Non eligible patients were excluded, as well as those who replied that they did not want to participate. Table 1 is an illustration of the screening outcome of the target population (N=219).
Table 1. Sampling and recruitment of study participants

<table>
<thead>
<tr>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total excluded from study</td>
<td></td>
</tr>
<tr>
<td>(n=108)</td>
<td>1</td>
</tr>
<tr>
<td>Deceased patient</td>
<td>1</td>
</tr>
<tr>
<td>Needed rest</td>
<td>3</td>
</tr>
<tr>
<td>Living far</td>
<td>50</td>
</tr>
<tr>
<td>No contact</td>
<td>21</td>
</tr>
<tr>
<td>Phone number suspended</td>
<td>6</td>
</tr>
<tr>
<td>Transportation issues</td>
<td>12</td>
</tr>
<tr>
<td>Below 18 years old</td>
<td>14</td>
</tr>
<tr>
<td>Travelled</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Total eligible participants (n=111)</td>
<td></td>
</tr>
<tr>
<td>Accepted and participated</td>
<td>79</td>
</tr>
<tr>
<td>Promised to participate</td>
<td>5</td>
</tr>
<tr>
<td>Refused to participate</td>
<td>2</td>
</tr>
<tr>
<td>Accepted but lacks transport</td>
<td>6</td>
</tr>
<tr>
<td>Accepted but working</td>
<td>19</td>
</tr>
</tbody>
</table>

Overall, 49.3% of study population were deemed ineligible to participate in the study and were then excluded for the reasons identified above in Table 1. An additional 14.6% of eligible individuals were unable to come to the clinic to complete the questionnaire and as such, they did not participate in the study. Refer to Figure 3. At the completion of data collection 36.1% of the target population (N=219) participated in
study. The total study population, those participants who completed the questionnaire was n=111.

Figure 3: Representation of study population sampling frame (N=219)

3.7 Data analysis

Data analysis was preceded by cleaning and verification of collecting data to ensure a valid dataset for conducting the analysis. The first step in preparing data was variable coding, a process whereby unique variable names are assigned to the questionnaire items. Data from each completed questionnaire (81 in total) entered into an Excel spreadsheet and checked for accuracy of data entry and variable coding errors. Next, data were imported into the Statistical Package for the Social Sciences (IBM SPSS Statistics 20). Frequencies and cross tabulation tables were computed to check for missing values and outliers. A final step in preparing data for analysis was to save data in SPSS format for subsequent analysis.

In keeping with the primary objectives of this study, data analysis was mostly descriptive. We began by assigning labels to response options for each CSQ-8 question. For example, question No. 1 on the CSQ-8 ask participants “How would you rate the
quality of service you received?”. Response categories included 4 – Excellent, 3–Good, 2–Fair, and 1–poor. The labels were assigned to each response option to facilitate interpretation of output from the analysis. This process was repeated for all question items, making sure that the rank order was maintained. For example, question No. 8 on the CSQ-8 has four categories of responses, including 1–No, definitely not; 2–No, I don’t think so; 3–Yes, I think so; 4–Yes, definitely. Though different in label and ordering sequence, the rank order is same for all questions on the CSQ-8 such that response option 1 is “less favourable” and response option 4 is “most favourable”.

Previous studies have used varying methods to categorize CSQ-8 data using various cut off points for differing levels of satisfaction (Marchand et al, 2011). As we could find no such consistency in methods of presenting data, we used percentages to present CSQ-8 score by the 4 levels of satisfaction.

First step in the analysis was to compute descriptive statistics (means, standard deviation and frequencies) for all eight question items assessing satisfaction with wound care services, as well as to describe study sample by socio-demographic characteristics, and wound care services utilization. The outputs from analysis were used to plot graphics and construct tables to illustrate the findings.

Subsequent analysis was performed to further explore, study data in-depth. This included correlation analysis of assess associations between the eight measures of patient satisfaction with wound care services, and respondent characteristics. Correlations were deemed significant at 0.05 level of significance. Additionally, t-tests were used to compare means between for the eight question items measuring satisfaction with wound care services. The mean scores, standard deviation and p-values were reported. For each CSQ-8 item, mean differences between male and female were
deemed significant at 0.05 level of significance. The findings were summarized and presented in tables and figures.

Thematic analysis was used for textual data resulting from open ended questions. Re-occuring themes emerged after data was analyzed. Quotes from respondents were used to illustrate themes.
Chapter 4: Findings

This chapter begins with a description of the participants who agreed to engage in the study. Socio-demographic and health related characteristics of the study sample are then presented, followed by responses to the CSQ-8 questionnaire. Finally, favorability ratings of all CSQ-8 item questions are presented, illustrating most favourable and less favourable responses.

4.1. Characteristics of study participants

In total 81 of the 111 eligible participants responded to our survey, giving a response rate of 73.0%. The average age of respondents was 44.5 years. A majority of respondents were male (65.4%), born outside of Qatar (75.3%), married (70.4%), had a college or university degree (40.7%), were employed (61.7%). Table 2 illustrates socio-demographic characteristics of study participants.

Table 2: Socio-demographic characteristics of study participants

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years) Mean [SD]</td>
<td>44.5 [15.6]</td>
</tr>
<tr>
<td>Range</td>
<td>19 - 83</td>
</tr>
<tr>
<td>Gender Male</td>
<td>53 (65.4)</td>
</tr>
<tr>
<td>Place of birth Qatar</td>
<td>20 (24.7)</td>
</tr>
<tr>
<td>Place of birth Outside Qatar</td>
<td>61 (75.3)</td>
</tr>
<tr>
<td>Marital status Single</td>
<td>19 (23.5)</td>
</tr>
<tr>
<td>Married</td>
<td>57 (70.4)</td>
</tr>
<tr>
<td>Divorced</td>
<td>3 (3.7)</td>
</tr>
<tr>
<td>Widowed</td>
<td>2 (2.5)</td>
</tr>
<tr>
<td>Level of education Primary or less</td>
<td>13 (16.0)</td>
</tr>
<tr>
<td>Secondary school</td>
<td>12 (14.8)</td>
</tr>
<tr>
<td>High school</td>
<td>23 (28.4)</td>
</tr>
<tr>
<td>College/university</td>
<td>33 (40.7)</td>
</tr>
<tr>
<td>Employment status Employed</td>
<td>50 (61.7)</td>
</tr>
<tr>
<td>Unemployed</td>
<td>17 (21.0)</td>
</tr>
<tr>
<td>Retired</td>
<td>12 (14.8)</td>
</tr>
<tr>
<td>No response</td>
<td>2 (2.5)</td>
</tr>
</tbody>
</table>
4.2 Causes of wound and referral sources

In this study, the survey tool included questions to assess causes of wound among participants, referral source and whether they had difficulty booking an appointment for at the wound care unit. There were variations in causes of wound among respondents; 58% of respondents identified surgery as the main cause, followed by accident (4.9%), fall (2.5%), and burns (2.5%). Unidentified causes were grouped under the category other (32.1%). A majority of patients reported having been referred to the wound care service by a doctor (87.7%). Most (82.7%) had no difficulty with the wound care appointment system. Table 3 presents details of responses on the causes of wound and referral source.

Table 3: Wound profile and referral management

<table>
<thead>
<tr>
<th>Variables</th>
<th>Frequency (n=79)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cause of wound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accident</td>
<td>4</td>
<td>4.9</td>
</tr>
<tr>
<td>Fall</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Burn</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Surgery</td>
<td>47</td>
<td>58.0</td>
</tr>
<tr>
<td>Others</td>
<td>26</td>
<td>32.1</td>
</tr>
<tr>
<td>Referral source</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor</td>
<td>71</td>
<td>87.7</td>
</tr>
<tr>
<td>Nurse</td>
<td>9</td>
<td>11.1</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Had difficulty with getting appointment in wound care service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>14</td>
<td>17.3</td>
</tr>
<tr>
<td>No</td>
<td>67</td>
<td>82.7</td>
</tr>
<tr>
<td>During visit, received education/information about caring for wound</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>78</td>
<td>96.3</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>3.7</td>
</tr>
</tbody>
</table>

4.3 Patient satisfaction with services

Tables 4 to 12 illustrates participant responses to individual items of the CSQ-8, assessing satisfaction with various aspects of wound care services. The findings are
presented by sub-headings, accompanied by tables to clearly illustrate the distribution of responses for each aspect of patient satisfaction that the CSQ-8 measures.

4.3.1 Quality of services

Quality of services was assessed through CSQ-8 question 1. “How would you rate the quality of service you received?” Participants had to choose one of four categories of response including: 4-Excellent, 3-Good, 2-Fair, 1-poor. Table 4 is a summary of participant ratings of quality of services.

**Table 4: Study participant rating of quality of services.**

<table>
<thead>
<tr>
<th>Response category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>25</td>
<td>30.9</td>
</tr>
<tr>
<td>Excellent</td>
<td>56</td>
<td>69.1</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A majority of respondents (69.1%) rated the quality of services they received as “excellent” and 30.9% as “good”.

4.3.2 Needed services

Participants were asked to respond to CSQ-8 question 2 “Did you get the kind of service you wanted? Response categories included: 1 (No, definitely), 2 (No, not really), 3(Yes, generally), 4 (Yes, definitely). Participant responses are illustrated on table 5.

**Table 5. Extend to which participants got services they wanted**

<table>
<thead>
<tr>
<th>Response category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, generally</td>
<td>25</td>
<td>30.9</td>
</tr>
<tr>
<td>Yes, definitely</td>
<td>55</td>
<td>67.9</td>
</tr>
<tr>
<td>No, definitely not</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A majority of participants (67.9%) reported “definitely” to getting the services they wanted and 30.9% “generally” compared to 1.2% who definitely did not.

4.3.3 Service needs met

In addition to need for service, CSQ-3 questions 3 assessed the extend to which the need was met. Response categories included: 4(Almost all of my needs have been met),
3 (Most of my needs have been met), 2(Only a few of my needs have been met), 1(None of my needs have been met). Participant responses are illustrated in Table 6.

### Table 6. Extend to which wound care service met participant needs

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>None of my needs have been met</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Most of my needs have been met</td>
<td>19</td>
<td>23.5</td>
</tr>
<tr>
<td>Almost all of my needs have been met</td>
<td>61</td>
<td>75.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>81</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

In total, 75.3% of respondents reported “almost all of my needs were met” and 23.5% “most of my needs have been met” compared to 1.2% who reported none of their needs were met.

4.3.4 Would recommend service to friend

One way to assess a good service is whether a previous user will recommend to another person. This was assessed through CSQ-8 question 4. “If a friend were in need of similar help, would you recommend our service to him or her?” Response options included: 1 (No, definitely not), 2 (No, I don’t think so), 3 (Yes, I think so), 4 (Yes, definitely). Table 7 presents details of participant response to this question.

### Table 7. Whether participant would recommend service to a friend

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, definitely not</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Yes, I think so</td>
<td>11</td>
<td>13.6</td>
</tr>
<tr>
<td>Yes, definitely</td>
<td>69</td>
<td>85.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>81</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

A majority of study participants would recommend service to a friend who needed help, 85.2% of respondents reported “yes, definitely” and 13.6% “yes, I think so” compared to 1.2% who reported they would not.

4.3.5 Satisfaction with help received

Patients coming to wound care service received various kinds of service. We assessed if respondents were satisfied with the amount of help received using CSQ-8
question 5 “How satisfied are you with the amount of help you received?” Responses included: 1(Quite dissatisfied), 2(Indifferent or mildly dissatisfied), 3(Mostly satisfied), 4(Very satisfied). The response are illustrate in table 8.

**Table 8.** Patient satisfaction with amount of help received

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quite dissatisfied</td>
<td>2</td>
<td>2.5</td>
</tr>
<tr>
<td>Indifferent or mildly dissatisfied</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td>Mostly satisfied</td>
<td>15</td>
<td>18.5</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>63</td>
<td>77.8</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
</tr>
</tbody>
</table>

As shown in table 8, 77.8% of respondents were “very satisfied” and 18.5% were “mostly satisfied” compared to the remainder who were indifferent or very dissatisfied.

4.3.6 Dealing effectively with problems

How helpful the services received may help patient to deal effectively with their wound was assessed through CSQ-8 question 6. “Have the services you received helped you to deal more effectively with your problems”. Response options were 4 (Yes, they helped a great deal), 3 (Yes, they helped somewhat), 2 (No, they really didn’t help), 1 (No, they seemed to make things worse). **Table 9** illustrates response categories of study participants.

**Table 9.** Whether services received helped patient deal more effectively with problems

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, they helped somewhat</td>
<td>8</td>
<td>9.9</td>
</tr>
<tr>
<td>Yes, they helped a great deal</td>
<td>73</td>
<td>90.1</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
</tr>
</tbody>
</table>

All participants agreed that services helped them to deal with problems, 90.1% reporting “yes, they helped a great deal” and 9.9% “yes, they helped somewhat”.

45
4.3.7 Overall satisfaction with services

Overall satisfaction is to assess everything together without being specific to one aspect of service. Participants were asked CSQ-8 question 7. “Overall, general sense, how satisfied are you with the service you received?” Response options were 4(Very satisfied), 3(Mostly satisfied), 2(Indifferent or mildly dissatisfied), 1(Quite satisfied). Distribution os responses to this question is illustrated in table 10.

**Table 10. Overall satisfaction with services received**

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly satisfied</td>
<td>15</td>
<td>18.5</td>
</tr>
<tr>
<td>Very satisfied</td>
<td>66</td>
<td>81.5</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Overall, 81.5% of respondents reported they were “very satisfied” with services received and 18.5% were “mostly satisfied”.

4.3.8 Would return to service if needed

One way to measure if a service is good is whether a previous user would return if they needed help again. This was assessed through CSQ-8 question 8. “If you were to seek help again, would you come back to our service?”. Responses to this question are presented in table 11.

**Table 11. Whether a patient would come back to service if needed help**

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, I think so</td>
<td>12</td>
<td>14.8</td>
</tr>
<tr>
<td>Yes, definitelly</td>
<td>69</td>
<td>85.2</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Among our respondents, 85.2% reported they would definitely return to the service if they were to seek help again while 14.8% thought they would do so.

4.3.9 Summary of CSQ-8

The results presented above show various levels of patient satisfaction with wound care services at HGH. In summary, all respondents (100%) rated the quality of service they received as “excellent” or “good” and a majority of respondents (98.8%) reported
receiving the kinds of service they wanted. A majority (98.8%) of respondents indicated that the services provided met “most” or “almost all” of their needs. Most of the respondents (98.8%) would recommend the services provided by the wound care unit to a friend that needed help and 96.3% indicated that they were “very satisfied” or “mostly satisfied” with the amount of help they received. All respondents (100%) reported that the services they received helped them “a great deal” or “somewhat” in dealing with their problems. As to overall satisfaction, 100% of respondents reported “very satisfied” or “mostly satisfied” with the services they received overall, general sense. Finally, all respondents (100%) reported that they would return to the wound care service if they needed help again.

Below, a figure 4 is a detailed summary of all the responses to the CSQ-8 questionnaire, ranked from most favourable (4 highest rank) to least favourable (1 lowest rank) response, for each question.

![Figure 4: Summary of measures of client satisfaction with wound care services](image)

As shown on the figure, there were variations in favourability ratings (percentage of responses attributed to rank 4 on the CSQ-8. The most favorable area of client satisfaction was in receiving the service they wanted, followed by being satisfied with the amount of help received, and then recommending the service to others. The least favorable areas were in overall satisfaction and being satisfied with the services met respondent needs.
satisfaction on the CSQ-8 was “Have the services you received helped you to deal more effectively with your problems” with 90.1% of respondents reporting that “Yes, they helped a great deal”. In contrast, the least favourable area of the CSQ-8 was “Did you get the service you wanted?” with 67.9% of respondents indicating “yes, definitely”.

4.4 Association between CSQ-8 and respondent characteristics

We assessed mean scores of CSQ-8 against gender and found no statistically significant differences between male and female in terms of reported satisfaction with wound care services (Appendix IX). Correlation of CSQ-8 against participant characteristics revealed no significant correlations at the 0.05 level (Appendix X).

4.5 Self rated health status

Self-rated health status is a subjective measure of health and was used in this study to examine participant’s perceptions of their overall general health. This was assessed using the question “Would you say your health is: 1-Excellent, 2-Very good, 3-Good, 4-Fair, 5-Poor. Responses are presented in table 12.

<table>
<thead>
<tr>
<th>Response categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>17</td>
<td>21.0</td>
</tr>
<tr>
<td>Very good</td>
<td>27</td>
<td>33.3</td>
</tr>
<tr>
<td>Good</td>
<td>33</td>
<td>40.7</td>
</tr>
<tr>
<td>Fair</td>
<td>4</td>
<td>4.9</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
<td>100.0</td>
</tr>
</tbody>
</table>

A majority of participants (54.3%) reported their health as “excellent” or “very good” compared to 40.7% who reported “good” and 5% as “fair”.

4.6 Qualitative analyses of open end questions

Respondents were asked whether having a wound was impacting their daily activities, and if so, to explain how it was impacting. A majority (60.5%) responded ‘yes’. Simple
thematic analyses identified four themes how the wound impacted patients daily activities.

**Theme 1: Challenges with work**

Ability to work was impossible for some as one participant commented “Difficult to work”. Another referred to it as “difficult to wear shoes if with dressing”, referring to the wound dressing. Another reason for being able to go to work according to one participant was “There were oozing and have to change daily”

**Theme 2: Pain**

Some participants explained their pain as “foot swelling”. Another participant described the pain as “reduced pain”. Another said “difficult to wear shoes if with dressing”, referring to the fact that wearing shoes with the dressing on was causing pain.

In another question, respondents were asked if they had transportation problems accessing the wound care service, and if so to explain how. A majority (79.0%) responded ‘No’ and 19.8% reported ‘yes’ to having difficulties. Two themes emerged to describe the difficulties.

**Theme 3: Cost**

There were costs incurred from transportation to access the wound care clinic.

Participants described them as “taking taxi and it’s expensive”. Another said “I have to come by taxi”. Others used alternative methods like using “help of friends” or “use of company transportation”.

**Theme 4: Timing**

Some participants explained that transportation issues resulted to postponement of visit or coming earlier, illustrated by “postpone the appointment”. Meanwhile another said “to come 2 hours before the appointment”. Others arranged with the ambulance service
due to limited mobility. If referring to means of transportation to the wound care service, one participant simply said “EMS”.
Chapter 5: Discussion

The goal of this chapter is to interpret and discuss the results of the research as presented in chapter 4, and their implications for clinical practice and future research. The chapter begins by summarizing the profile of respondents. Next, findings are discussed in relation to study objectives; and the literature, and conclude with study limitations and implications for future research.

5.1 Profile of respondents

This cross sectional study examined patient satisfaction with wound care services at HGH in Qatar. Both retrospective and prospective approach was used to achieve data collection. The researcher was given permission by the author to use the Client Satisfaction questionnaire (CSQ-8), (Attkisson, 2013), (See Appendix VI). Questions were added to gain information about the participants health concerns and their socio-demographic concerns (See Appendix VI).

General information collected about participants’ general health concerns, revealed that most patients treated by the interprofessional team at the Outpatient Wound care Clinic at the Hamad General Hospital were referred by doctors (87.7%). Only 11.1% of the participants were referred to the clinic by nurses. Treatment of surgical wounds was the most frequently reported cause of the patients (47%) seeking treatment at the Outpatient Wound Care Clinic. The majority of patients (67%) reported receiving educational information from the interprofessional team that was helpful for their recovery.

5.2 Relating findings to overall study objectives

The overall objective of this research study was to determine the level of patient satisfaction with an interprofessional approach to wound care management by patients who received treatment at the Outpatient Wound Care Clinic at the HGH in Doha,
Qatar. Patient satisfaction was assessed through three specific research questions. 1) What is the level of patient satisfaction with the referral process to the Wound Care Clinic? 2) What is the level of patient satisfaction with the coordination of wound care services at the interprofessional clinic? 3) What is the level of patient satisfaction with information provided to help patients manage their wounds?

5.2.1 Patient satisfaction with referral appointment system

Patient satisfaction with the referral appointment system to interprofessional wound care service was determined in terms of level of difficulty getting appointment. The majority of respondents (82.7%) answered as having no difficulty with the wound care service appointment system. This finding is an indication that the appointment system at the wound care clinic is working well for the majority of the patients. However, as 17.3% of the patients indicated that they did indeed have difficulty making an appointment at the clinic, there is need for improvement. It is also evident that most of the patients are referred to the clinic by doctors (87.7) and nurses (11.1). As such patients receive clear instructions regarding the referral, including information about where they are to go and how to locate the wound care unit. Additionally, research results demonstrated that patients (96.3%) who visited the interprofessional wound care clinic received educational information about how to self-manage their wounds.

5.2.2 Patient Satisfaction with wound care services

Overall, findings from this study were very positive. Considered together (response options 4 and/or 3), all respondents (100%) rated the quality of service they received as “excellent” or “good” and a majority of respondents (98.8%) reported receiving the kinds of service they wanted. A majority (98.8%) of respondents indicated that the services provided met “most” or “almost all” of their needs. Most of the respondents (98.8%) would recommend the services provided by the wound care unit to a friend that
needed help, and 96.3% indicated that they were “very satisfied” or “mostly satisfied” with the amount of help they received. All respondents (100%) reported that the services they received helped them “a great deal” or “somewhat” in dealing with their problems. As to overall satisfaction, 100% of respondents reported “very satisfied” or “mostly satisfied” with the services they received overall, general sense. Finally, all respondents (100%) reported that they would return to the wound care service if they needed help again.

Though this study revealed very positive ratings of patient satisfaction with wound care services, an examination of the findings in terms of favorability ratings of the top ranked response option reveals variations among CSQ-8 question items. Our study revealed that the most favourable area of client satisfaction on the CSQ-8 was “Have the services you received helped you to deal more effectively with your problems” with 90.1% of respondents reporting that “Yes, they helped a great deal”. In contrast, the least favourable area was “Did you get the service you wanted?” with 67.9% of respondents indicating “yes, definitely”. The observed variation in favorability ratings suggests that despite generally high levels of patient satisfaction, there are still areas that need improvement, therefore cannot be ignored. In general, patients have limited experience with health care beyond their own. It can be challenging for them to decide what is satisfactory care.

A major lesson from using the CSQ-8 to assess patient rating of satisfaction with wound care services is that, the eight questions of the CSQ-8 can be categorized into three groups based on similarity in percentage score on individual questions items:

Group 1: Characterised by high percentage ratings (above 85%) of satisfaction for CSQ-8 (Q4. If a friend were in need of similar help, would you recommend our service to him or her?, Q6. Have the services you received helped you to deal more effectively
with your problems?, Q8. If you were to seek help again, would you come back to our service?)

Group 2: Questions with medium ratings (75 - 85%) of satisfaction for CSQ-8(Q3. To what extent has our service met your needs?, Q5. How satisfied are you with the amount of help you received?, Q7. In an overall, general sense, how satisfied are you with the service you received?)

Group 3: A category with the lowest ratings (below 75%) of satisfaction (Q1. How would you rate the quality of service you received?; Q2. Did you get the kind of service you wanted?) with services.

Overall, results from this study found that patients who were referred to the Outpatient Wound Care Clinic, and who received wound care services delivered by an interprofessional team, were generally satisfied with the services they received (100%). However, it is also important to note that despite having mostly favourable patient response ratings of satisfaction, the overall rating of the quality of service, and respondents' opinions on whether they received the services wanted, was below 70%. This indicates that there are services provided that need to be understood in more detail so that actions can be taken to improve the quality of health care services provided.

5.3 Comparisons with the literature

Previously, the researcher documented gaps in the literature regarding lack of evidence that has been published in the literature on patient satisfaction with interprofessional wound care services. Although this study did not specifically assess satisfaction with interprofessional collaboration, it has addressed patient satisfaction with wound care services provided in a clinical setting where various professionals come together to deliver care. Such health care service delivery is indeed, IPC.
As such, the findings in this research study are similar to the findings of similar studies that have measured patient satisfaction with interprofessional care (Gottrup, 2004; Crutchner et al., 2004; Barcelo et al., 2010; Capella, Smith, Philip, & Putnam, 2010; Strasser et al., 2008; Reeves, Goldman & Oandasan, 2007; Mathews, Ryan, & Bulman, 2015; Gupta, Patel, & Lis, 2015). Several studies found that employing a multidisciplinary team strategy in health care delivery can lead to improved outcomes for patients (Gottrup, 2004; Crutchner et al., 2004; Barcelo et al., 2010; Capella, Smith, Philip, & Putnam, 2010; Strasser et al., 2008). One study that examined the outcomes of IPC (Reeves, Goldman & Oandasan, 2007) found that interprofessional team work was associated with improved patient satisfaction and patient care. The high levels of satisfaction reported in this study are indicative of patients’ confidence with health care services. Mathews, Ryan, & Bulman (2015) reported similar findings in a study examining satisfaction with wait times among cancer patients in a collaborative practice. They found that patients were satisfied and had confidence with the system; and that perceptions of satisfaction were influenced by three interrelated dimensions, including the interpersonal skills of treating physicians, coordination, and timeliness of care (Mathews, Ryan, & Bulman, 2015).

Gupta, Patel, & Lis, (2015 reported that a higher patient satisfaction score is an indicator of a positive patient experience. In this study involving cancer patients, the authors showed that there was a higher survival rate among patients with higher satisfaction scores who also had higher self-rated health. To compare this finding with our study, patient satisfaction rates were very high, though we did not assess outcome of care, it is likely that a positive outcome was achieved.

Gagliardi, Dobrow, & Wright (2011) conducted a systematic review of interprofessional practice models and their use in clinical management. Their study
revealed that using interprofessional practice as a care delivery model has numerous benefits to both patients and health care organizations. This included reductions in patient length of stay, reduction in cost, and complications that result in the readmissions of patients have also been reduced, increased levels of patient and family satisfaction, increased job satisfaction of the multidisciplinary staff, and increased case manager collaboration. The high rates of patient satisfaction reported in our study is an indication that the benefits of interprofessional practice observed in previous studies are likely to be present in our study setting, though still have to be studied.

Interprofessional practice promotes collaboration among healthcare professionals in providing quality healthcare. Mary Beth, Pek Hong, &Pandi (2015) argue that by promoting interprofessional collaboration, interprofessional practice works to improve patient safety, augment patient satisfaction, and also increase the levels of innovation in patient care delivery. Most significantly, Interprofessional Practice increases staff motivation, well-being and retention rates within the organization. Streeton (2016) explains that multidisciplinary interprofessional teams work to improve nurse perceptions of teamwork with physicians and other medical professionals, and as such, nurses feel more comfortable in providing feedback to the physicians. Interprofessional Practice yields positive patient satisfaction survey results, and more constructive, meaningful daily nurse-physician interactions.

In a study by Bryant, Reeves, & Zwarenstein (2003), results also showed that Interprofessional Practice as a method of health care delivery improved interprofessional collaboration and thereby improved inpatient care and patient satisfaction. Further research has shown that effective interprofessional communication and collaboration can positively influence patient satisfaction and outcomes (Sargeant, MacLeod, & Murray, 2011). Additional studies have shown that health care delivered
through interprofessional teams working together, improves the quality of the care delivered, positive patient outcomes, increased patient satisfaction with the care received, efficiency of the services delivered, and job satisfaction (McNelis, Horton-Deutsch, & Lay, 2015).

Finally, this study assessed patient satisfaction with an interprofessional approach to wound care management at a tertiary hospital in Qatar, using a patient satisfaction framework as measured by the CSQ-8. The CSQ-8 performed very well, with skewed findings highlighting very high levels of satisfaction with wound care management. Though the responses are not presented in terms of the IPE core competency domains previously mentioned, the rates of satisfaction observed can be attributed to the interprofessional collaborative practice as the service is provided by professionals from various departments. Despite having high rates of satisfaction, the CSQ-8 has also revealed areas with low satisfaction scores: the overall rating of the quality of service, and respondents' opinions on whether they received the services wanted; all of which are areas that need improvement. The uniqueness of this study were understanding the patient satisfaction within an interprofessional approach to wound.

5.4 Study Limitations

Every research study has limitations. It is important that the researcher acknowledge these limitations as they may have a profound effect of the research results. This study was a sample of convenience. Patients who had received treatment at the Outpatient Wound Care Clinic at HGH were invited to participate in the study. The sampling was also drawn from this one clinic making it a single site study. Therefore the findings have to be interpreted with caution as they may not totally reflect the situation at all sites providing wound care services.
The study used a cross sectional design where a single data collection was conducted. Participants were asked to complete a questionnaire retrospectively. The majority of the patients had received treatment at the wound care clinic some time ago in the past and were then asked to remember what had happened in the past. Sometimes, it may be difficult for the patients to recall their treatment experience and they may not remember every thing that happened. Therefore, in this study, the reported responses may be subject to recall bias (Sedgwick, 2015).

For this research study, the researcher chose to use a structured questionnaire that collected information as required by the questionnaire. As the research received permission from the author to use this quantitative tool. Participants were therefore limited to responding to the set questions and were not permitted to explain more beyond selected responses. As a result, the researcher could not collect more information about why some patients thought the services did not meet their needs. This qualitative data would have been very useful in making recommendations on how the clinic could improve its services.

As well, this was the first time the Client Satisfaction (CSQ-8) questionnaire was used with this population in Qatar. For some participants, the questionnaires were read out in English to the participants and the researcher documented the answer of their choice. At times, participants wanted to select more than one response. The questionnaire required the participants to select only one. This complexity in data collection is referred to as social desirability bias (Gaston & Sabourin, 1992). Although not all participants needed help with completing the questionnaire, it does raise a question as to whether the data collection tool was culturally relevant for this population.
Use of the IPE Shared Core Competency Model to fully guide this study was limited. This limitation was due to the fact that we could not separate out participant responses by the four IPE domains - role clarification, interprofessional communication, patient and family centered-care and shared decision making. Separating out responses by domain may help understand the extend to which the IPE core competencies are developed or under developed in the hospital setting where the study was conducted.

Finally, this study was to be limited to patients who used the services at the Outpatient Wound Care Clinic at HGH. Participants did indeed use these services for their wound care, however, there is no way of knowing whether patients used other services for their wounds in addition to the Outpatient Wound Care Clinic. Participant responses may be contaminated by other experiences and health care services received through another agency. Knowing that the clinic was the only place where patients sought treatment would be helpful in understanding how well the interprofessional team is performing at the clinic.

5.5 Implications of the study

5.5.1 Implications for practice

Results from this research study found that patients are genuinely satisfied with the wound care services received at the Outpatient Wound Care Clinic at HGH. The fact that these wound care services are offered through an interprofessional practice which brings together professionals from various professions, is an indication that interprofessional practice is an effective approach to health care delivery. Providing wound care services to patients through interprofessional collaboration is a model that needs to be further developed in other areas of health care delivery. Such a health care delivery model will require developing a model of care that defines the role of each professional, clearly identifies the scope of practice for each professional and gives
guidelines on how professionals will work together in various settings. Having such a clearly defined model will be advantageous when it comes to evaluating how well the interprofessional practice is performing and how well it is doing in meeting patient needs.

5.5.2 Implications for policy

Although the results of this study were very favorable in recording the patient satisfaction with an interprofessional approach to wound care services, still, over 30% of the participants felt that they did not receive the services they wanted. This issue needs to be addressed. There is a need for set policies around patient satisfaction with services that will solicit continuous feedback from patients regarding satisfaction with services received. A policy could be implemented that ensures patient feedback on the quality and satisfaction of care received is obtained with each visit. This would ensure that patients are offered a brief questionnaire that ask if their needs have been met. This would be essential in knowing if interprofessional practice is the most effective approach to health care delivery.

5.5.3 Implications for future research

Whenever research is completed, results generally lead to additional questions that should be answered through more research. This study has raised significant implications for future research. There is a need to evaluate interprofessional practice in health care delivery and not just wound care services.

Secondly, a qualitative method needs to be employed in order to gain an in-depth understanding of patients’ satisfaction or dissatisfaction with interprofessional practice. More in-depth information of the patients’ opinions on what it means to be satisfied or dissatisfied would be very useful to give direction on how the services can be altered and improved.
Finally, it would be very useful to examine the satisfaction of the health care providers involved in the interprofessional practice at the Outpatient Wound Care Clinic. This kind of information would be invaluable in contributing additional information that explores each aspect of the wound service.
Chapter 6: Conclusion

In conclusion, this study is the first of its kind in Qatar to examine patient satisfaction with an interprofessional approach to wound care services in Qatar. We encountered some difficulties with recruitment, but did overcome them and complete data collection. Overall, we found that patients were mostly satisfied with wound care services and this can be improved. The strength of this proposed study is that the study results could have major implications for Qatar, especially as there are known efforts to introduce interprofessional practice in Qatar. To date, there is limited published literature on the advantages of interprofessional practice for patients living in Qatar and the Middle East. The Qatar Supreme Health Council has openly expressed support for innovations capable of helping to achieve its prescribed goal - to provide high quality health care of international standards in accordance with Qatar's National Vision 2030. Thus, this proposed study is timely, and its implications could be far reaching as the results will inform the design, implementation and adoption of interprofessional practice in health care delivery as a way to improve patient care in Qatar. Building on the evidence from this study, more research can be generated to fill the knowledge gap on the subject especially in the Middle Eastern countries.
References


APPENDIX I: Study timeline

This study will last for one year

<table>
<thead>
<tr>
<th>Task</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule by month</td>
<td>1  2  3  4  5  6  7  8  9  10  11  12  13 - 24</td>
</tr>
<tr>
<td>Getting the final approval of the project</td>
<td>x  x</td>
</tr>
<tr>
<td>Design of the questionnaire</td>
<td>x  x</td>
</tr>
<tr>
<td>Recruitment</td>
<td></td>
</tr>
<tr>
<td>Data collection</td>
<td>x  x  x  x  x  x  x  x  x  x  x  x  x</td>
</tr>
<tr>
<td>Data analysis</td>
<td></td>
</tr>
<tr>
<td>Writing thesis</td>
<td></td>
</tr>
<tr>
<td>Writing manuscripts</td>
<td>x  x  x  x  x</td>
</tr>
<tr>
<td>Progress report to ethics boards</td>
<td>x</td>
</tr>
</tbody>
</table>
APPENDIX II: Letter to HGH Executive for Permission

January 25th 2016

Mr. Mohammed Shafii Mahate
AED, Quality Improvement.

Subject: Research Proposal # 15417. Patient satisfaction with an interprofessional approach to wound care in Qatar

With reference to the above subject, I had envisaged recruiting patients who come to HGH from the start of the study. However, after one week of data collection, we had only 2 out of 4 patients who consented to participate in our study. In order to speed up/improve data collection, we sought a modification of the protocol to contact patients who had used wound care services in 2015 to seek their consent and enrol them in the study. As per previous permission, I will therefore access the patient registry to get patient contact information from the patient registry to request patients to participate in this research project.

Thank you for your cooperation.

Sincerely,

Ms. Shaikha Al Qatani
Director of Nursing, OPD & WCS

Tel: (+974 000000) P.O.Box 3050
Fax: (+974 000000) Doha, Qatar
@hmp.org.qa www.nhc.org.qa
Appendix III: Ethics Certificate CHREB

Conjoint Health Research Ethics Board
Research Services Office
3rd Floor MacKinnie Library Tower (MLT 300)
2500 University Drive, NW
Calgary AB T2N 1N4
Telephone: (403) 220-7990
chreb@ucalgary.ca

CERTIFICATION OF INSTITUTIONAL ETHICS REVIEW

This is to certify that the Conjoint Health Research Ethics Board at the University of Calgary has examined the following research proposal and found the proposed research involving human participants to be in accordance with University of Calgary Guidelines and the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans 2010 (TCPG 2). This form and accompanying letter constitute the Certification of Institutional Ethics Review.

Ethics ID: REB15-2811
Principal Investigator: Kim Critchley
Co-Investigator(s): Emmanuel Ngwakongnwi
Student Co-Investigator(s): Shaikha Al-Qahtani
Study Title: Patient satisfaction with an interprofessional approach to wound care in Qatar: A Master of Nursing Thesis Proposal
Sponsor (if applicable): 
Effective: December 15, 2015
Expires: December 15, 2016

Restrictions:
This Certification is subject to the following conditions:

1. Approval is granted only for the project and purposes described in the application.
2. Any modification to the authorized study must be submitted to the Chair, Conjoint Health Research Ethics Board for approval.
3. An annual report must be submitted within 30 days prior to expiry date of this Certification, and should provide the expected completion date for the study.
4. A final report must be sent to the Board when the project is complete or terminated.

Approved By: Stacey A. Page, PhD, Chair, CHREB

Date: December 15, 2015

https://iriss.ucalgary.ca/IRISSPROD/Doc/0/ADUJ1JK9V4Q4J8C6U16GIPE071/from... 17/12/2015
Appendix IV: Approval letter Hamad
Ref No: MRC/1457/2015  
Date: 16th December 2015  

Ms. Shaikha Ali Al Qahtani  
Director of Nursing  
OPD & Wound Care Management  
Ambulatory Care Services  
HMC  

Dear Ms. Shaikha,  

Subject: Research Proposal # 15417 “Patient satisfaction with an interprofessional approach to wound care in Qatar”  

This is in reference to your submission of the above titled proposal to the Medical Research Center for review.  

We would like to inform you that Medical Research Center has no objection for this Quality Improvement/Audit Project to be conducted/published. Kindly submit the article to Medical Research Center after publication. The Principal Investigator should notify the Medical Research Center immediately of any proposed protocol changes or modification to the approved protocol.  

Documents reviewed by Medical Research Center:  
1. Compliance Checker form  
2. Protocol—Patient satisfaction with an interprofessional approach to wound care in Qatar  
3. Research Information Sheet_16th December 2015  
4. Client Satisfaction Questionnaire  

We wish you all success and await the results in due course.  

Yours sincerely,  

Ms. Angela Heather Ball  
AED Business Develop & Research  
Medical Research Center  

Cc: Dr. Abdulla AlNaimi, Chairman, HGH Research Committee
RESEARCH INFORMATION SHEET

Dear Participant:

You are invited to participate in Project title: “Patient satisfaction with an interprofessional approach to wound care in Qatar”

Name of Principal Investigator: Shaikha Al, Al-Qahtani, Hamad Medical Corporation

The OPD / WCS Department at Hamad Medical Corporation is conducting this research to assess patients’ level of satisfaction with having to receive wound care services from professionals from different departments, working together.

The study will include patients coming to wound care clinic who voluntarily consent to participate in a brief survey.

You are invited to take part in an anonymous paper questionnaire. This should take around 20 minutes to complete.

Your participation in the questionnaire is completely voluntary. If you choose to complete the questionnaire then completion is considered approval of participation. You can stop participating at any time and we will not hold it against you.

There is no risk to participate in this study. Your choice to participate or not will not affect your employment status, and your immediate supervisors/managers will not know your participation answers. There are no direct benefits to you by being part of the research. However, your participation may assist in helping us improve services.

No financial compensation for your participation

This research is not funded, is a Masters of Nursing thesis project.

Your participation is anonymous, and all information will be kept confidential.

You have the right of knowing the results of this study at the end of it.

The total estimation for this study is about 200 participants.

If you have questions or concerns, or if you think the research has hurt you, talk to the research team at University of Calgary in Qatar, P.O. Box 23133 Doha, Qatar. Tel. 4406 5239 or yacritech@ucalgary.ca

If you have questions about your rights as a volunteer, or you want to talk to someone outside the research team, please contact:

- HMC Medical Research Centre at 4439 2449 or research@hamad.qa

Version Date: 16 December 2015
Dear HGH wound care service user,

I would like to invite you to participate in my Masters thesis research project entitled: “Patient Satisfaction with an interprofessional approach to wound care management in Qatar”. I would appreciate your kind effort in filling this questionnaire in-person or by phone. The questionnaire is composed of consent form page and another xxxx pages. Please ensure to complete all the questions before submitting. Completing the questionnaire shall not take you more than 20 minutes of your valuable time.

This project is supervised by Dr. Kim Critchley, Dean/CEO, and Professor at the University of Calgary in Qatar and Co-supervised by Dr. Emmanuel Ngwakongnwi, Assistant Professor at the University of Calgary in Qatar.

The purpose of this study is to explore patients experiences with wound care services. This study will help the research team in designing and implementing future interprofessional education activities to foster collaborative working relationships in the provision of wound care in Qatar. Your responses will be anonymous and confidential. No one will be affected by his or her answers.

If you have any question about this project, please do not hesitate to contact us:

Ms. Shaikha Ali Al-Qatani
Master student at University of Calgary
Tel: (+974) 55288587
Email: saaalqah@ucalgary.ca

Dr. Kim Critchley, Dean/CEO & Professor
University of Calgary in Qatar
P. O. Box 23133 Doha, Qatar
Email: kacritch@ucalgary.ca

Dr. Emmanuel Ngwakongnwi
Assistant Professor
University of Calgary in Qatar
P. O. Box 23133 Doha, Qatar
Tel. 4406-5239
Email: engwakon@ucalgary.ca

Regards,
Ms. Shaikha Ali Al Qahtani
Appendix VI: Client Satisfaction Questionnaire-CSQ-8/survey instrument

Patient satisfaction with an interprofessional approach to wound care in Qatar

QUESTIONNAIRE (English version – telephone survey)

Study ID: __________________
Date: __________________

You must be 18 years or older to participate in this survey. The information gathered in this survey is for research purposes and may be used to improve wound care services in the future. Completion of the survey will take about 20 minutes or less. Your help is voluntary and you are free to stop the interview at any time. You may decline to answer any question you feel uncomfortable with. Please be assured that your responses will remain anonymous. To ensure your privacy, your name and phone number will not be retained in the survey data and there will be no way of identifying you.

[start with eligibility questions]

Are you 18 years of age or older?

☐ Yes ☐ No

Only respondent who answer yes can participate in the survey
CSQ-8 UK English

CLIENT SATISFACTION QUESTIONNAIRE
CSQ-8

Please help us improve our service by answering some questions about the help that you have received. We are interested in your honest opinions, whether they are positive or negative. Please answer all of the questions. We also welcome your comments and suggestions. Thank you very much. We appreciate your help.

CIRCLE YOUR ANSWERS

1. How would you rate the quality of service you received?

<table>
<thead>
<tr>
<th>4 Excellent</th>
<th>3 Good</th>
<th>2 Fair</th>
<th>1 Poor</th>
</tr>
</thead>
</table>

2. Did you get the kind of service you wanted?

<table>
<thead>
<tr>
<th>1 No, definitely not</th>
<th>2 No, not really</th>
<th>3 Yes, generally</th>
<th>4 Yes, definitely</th>
</tr>
</thead>
</table>

3. To what extent has our service met your needs?

<table>
<thead>
<tr>
<th>4 Almost all of my needs have been met</th>
<th>3 Most of my needs have been met</th>
<th>2 Only a few of my needs have been met</th>
<th>1 None of my needs have been met</th>
</tr>
</thead>
</table>

4. If a friend were in need of similar help, would you recommend our service to him or her?

<table>
<thead>
<tr>
<th>1 No, definitely not</th>
<th>2 No, I don't think so</th>
<th>3 Yes, I think so</th>
<th>4 Yes, definitely</th>
</tr>
</thead>
</table>

5. How satisfied are you with the amount of help you received?

<table>
<thead>
<tr>
<th>1 Quite dissatisfied</th>
<th>2 Indifferent or mildly dissatisfied</th>
<th>3 Mostly satisfied</th>
<th>4 Very satisfied</th>
</tr>
</thead>
</table>

6. Have the services you received helped you to deal more effectively with your problems?

<table>
<thead>
<tr>
<th>4 Yes, they helped a great deal</th>
<th>3 Yes, they helped somewhat</th>
<th>2 No, they really didn't help</th>
<th>1 No, they seemed to make things worse</th>
</tr>
</thead>
</table>

7. In an overall, general sense, how satisfied are you with the service you received?

<table>
<thead>
<tr>
<th>4 Very satisfied</th>
<th>3 Mostly satisfied</th>
<th>2 Indifferent or mildly dissatisfied</th>
<th>1 Quite dissatisfied</th>
</tr>
</thead>
</table>

8. If you were to seek help again, would you come back to our service?

<table>
<thead>
<tr>
<th>1 No, definitely not</th>
<th>2 No, I don't think so</th>
<th>3 Yes, I think so</th>
<th>4 Yes, definitely</th>
</tr>
</thead>
</table>

WRITE ANY COMMENTS OVERLEAF

Distributed by Tamalpais Matrix Systems, LLC
info@CSQscales.com
www.CSQscales.com

Copyright © 1979, 1989, 1990, 2013 Clifford Attkisson, Ph.D.
Use, transfer, copying, reproduction, merger, translation, modification, or enhancement
(in any format including electronic), in whole or in part is forbidden without written permission.
Now am going to ask you some questions about yourself

Q9. Identify sex?  
☐ 1. Male  
☐ 2. Female

Q10. Q22. What is your age?  
☐ 1. In years _______  
☐ 2. Decline to answer

Q11. Where were you born?  
☐ 1. Qatar  
☐ 2. Outside Qatar

Q12. What is your marital status?  
☐ 1. Single  
☐ 2. Married  
☐ 3. Divorced  
☐ 4. Widowed  
☐ 5. Decline to answer

Q13. What is the highest education level you have completed?  
☐ 1. Primary or less  
☐ 2. Secondary school  
☐ 3. High School  
☐ 4. College / University

Q14. What is your current employment status?  
☐ 1. Employed  
☐ 2. Unemployed  
☐ 3. Retired

Q15. What is your best estimate of your height___________ in centimeters?

Q16. What is your best estimate of your weight ___________ in kilograms?

Now am going to ask you some questions about yourself

Q17. What would you say caused your wound?  
☐ 1. Accident  
☐ 2. Fall  
☐ 3. Burn  
☐ 4. Surgery  
☐ 5. Other

Q18. How did you know about our service? (Referral source)  
☐ 1. Doctor referral  
☐ 2. Nurses  
☐ 3. Family / Friends  
☐ 4. Media  
☐ 5. Other
Q19. Did you find any difficulty to get your appointment in wound care service?

- [ ] 1. Yes
- [ ] 2. No

Q20. During your visit, did you receive any education/information about caring of your wound?

- [ ] 1. Yes
- [ ] 2. No

Q20-A. If yes, did you find that information helpful?

- [ ] 1. Yes
- [ ] 2. No

Q20-B. If no, what do you think was lacking?

______________________________

Q21. Do you think having this wound is impacting your daily activities?

- [ ] 1. Yes
- [ ] 2. No

Q21-A. If Yes, how is this impacting your daily activities?

Q22. Do you have any help at home with managing your wound?

- [ ] 1. Yes
- [ ] 2. No

Q23. Are you currently taking any medication?

- [ ] 1. Yes
- [ ] 2. No

Q24. Do you have any transportation problem in accessing wound care service?

- [ ] 1. Yes
- [ ] 2. No

Q24-A. If yes, how did you manage to come for wound dressing?

Q25. Are you interested in attending any future patient education program?

- [ ] 1. Yes
- [ ] 2. No

Q26. How would you rate the quality of wound care service?

- [ ] 1. Excellent
- [ ] 2. Very good
- [ ] 3. Good
- [ ] 4. Fair
- [ ] 5. Poor
General Questions

Q27. Would you say your health is?
☐ 1. Excellent
☐ 2. Very good
☐ 3. Good
☐ 4. Fair
☐ 5. Poor

Q28. Have you ever been diagnosed with any of the following conditions?

28.2- High blood pressure  ☐ 1. Yes   ☐ 2. No   ☐ 3. Unsure
28.3- Migraine headache    ☐ 1. Yes   ☐ 2. No   ☐ 3. Unsure
28.4- Heart disease        ☐ 1. Yes   ☐ 2. No   ☐ 3. Unsure
28.5- Arthritis           ☐ 1. Yes   ☐ 2. No   ☐ 3. Unsure
28.6- Breathing problems  ☐ 1. Yes   ☐ 2. No   ☐ 3. Unsure

Q29. How satisfied are you with your life in general?
☐ 1. Very satisfied
☐ 2. Satisfied
☐ 3. Neither satisfied nor dissatisfied
☐ 4. Dissatisfied
☐ 5. Very dissatisfied
☐ 6. Decline to answer
Appendix VII: Letter authorizing use of survey tool

September 29, 2015

Kim A. Critchley, PhD, RN
Professor, Dean, & CEO
University of Calgary in Qatar
Al-Rayyan Campus
P.O. Box 23133
Doha, QATAR

Dear Doctor Kim A. Critchley:

RE: CSQ Scales® TMS1500837-BC417

Thank you for your ongoing interest in the CSQ Scales®! I am pleased that you have decided to use the CSQ-8 (UK English, Form TMS.180) in graduate student research, evaluation, and quality assurance programs within The University of Calgary in Qatar. Please keep me informed about your findings and let me know when I can further assist in support of your academic program.

Your order (200 of CSQ-8, UK English, TMS.180 and The CSQ Scales® Reprint Portfolio) shipped on 9/29/15, via USPS Priority International Mail Service. Delivery to your location by UPS is expected on or before 10/15/15. The invoice for your order (TMS1500837) is enclosed with this letter, marked “paid in full”. Your credit card was charged ($230.00, dated 9/29/15), as payment in full for the order.

The CSQ Scales® are used worldwide and are translated into 30+ languages, including Arabic. A list of currently available translations can be found in The CSQ Scales Newsletter issue that was attached to an email to you, dated 9/29/15. Up-to-date information can always be obtained from the CSQ Scales® website: www.csq scales.com

Also, please follow the CSQ Scales® on Twitter: @CSQinfo

In the email message sent to you, dated 9/29/15, please find, as PDF attachments, a SAMPLE, watermarked copy of the CSQ-8 in UK English (TMS.1085). Please use the watermarked copy when communicating with your business colleagues, graduate and research assistants, and other colleagues beyond your organization. In doing so, you will assist me in preventing unauthorized, illegal uses and also in communicating knowledge of the CSQ-8 to others who may want to request approved uses of the instruments. Finally, your shipping package includes a CD-R, The CSQ Scales® Reprint Portfolio, which contains 50+ PDF reprints covering the history of development and use of the CSQ Scales®, including the CSQ-8.

Best regards,

Clifford Attiksson, Ph.D.
President and Chief Executive Officer

Distributor of CSQ Scales
info@CSQ scales.com

660 Amaranth Boulevard • Mill Valley, CA 94941-2605 • Voice: 415-310-5396 • Fax: 339-440-9537 or 866-770-4975 (U.S. Toll Free)
Email: info@TamMatrix.com • Website: TamMatrix.com • Twitter: @CSQinfo

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Appendix VIII: Participant consent form

CONSENT FORM TEMPLATE

TITLE: Patient satisfaction with an interprofessional (IP) approach to wound care in Qatar.

SPONSOR: None funded Masters of Nursing thesis project

INVESTIGATORS:
Student – Miss Shaikha Ali Al-Qahtani
Supervisor/Co-supervisor - Dr. Kim Critchley / Dr. Emmanuel Ngwakongnwi

This consent form is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more details about something mentioned here, or information not included here, please ask. Take the time to read this carefully and to understand any accompanying information. You will receive a copy of this form.

BACKGROUND
Wound care unit is responsible for managing wound care at Hamad General Hospital. Wound care service providers include professionals from multi-disciplines – orthopedics, nurses, educators, and dietitian. How well an interprofessional approach to wound care improves patient outcomes has not been studied in Qatar. This can be achieved partly by assessing patient satisfaction. This study will attempt to fulfill this gap.

WHAT IS THE PURPOSE OF THE STUDY?
The overall objective of this study is to determine the level of patient satisfaction with an interprofessional approach to wound care management. Specific objectives are to:
Determine patient satisfaction with the intake / referral process
Determine patient satisfaction with coordination of wound care services
Determine patient satisfaction with educational materials for wound care

WHAT WOULD I HAVE TO DO?
Participate in a telephone survey or in person
May require up to 20 minutes to complete the phone survey

WHAT ARE THE RISKS?
None

WILL I BENEFIT IF I TAKE PART?
If you agree to participate in this study there may or may not be a direct medical benefit to you. The information we obtain from this study may help us to provide recommendations to improve wound care for all patients.

DO I HAVE TO PARTICIPATE?
Participation in this study is voluntary. You may withdraw from the study at any time without jeopardizing your healthcare. You may withdraw before or during a scheduled interview by simply stating “I do not want to continue with this study for personal reasons”. The researchers may withdraw your participation in the study. This may happen when new information becomes available that might affect your willingness to participate; in that case you will be informed immediately.

SIGNATURES
Your signature on this form indicates that you have understood to your satisfaction the information regarding your participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the investigators, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time without jeopardizing your health care. If you have further questions concerning matters related to this research, please contact:

Dr. Emmanuel Ngwakongnw, Tel. 4406-5239
Or
Dr. Kim Critchley, Tel. 4406 - 5202
If you have any questions concerning your rights as a possible participant in this research, please contact The Chair of the Conjoint Health Research Ethics Board at the office of Medical Bioethics, +1403-220-7990.

<table>
<thead>
<tr>
<th>Participant’s Name</th>
<th>Signature and Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigator/Delegate’s Name</td>
<td>Signature and Date</td>
</tr>
</tbody>
</table>

The University of Calgary Conjoint Health Research Ethics Board has approved this research study.
A signed copy of this consent form has been given to you to keep for your records and reference.
Appendix IX: Mean ratings of satisfaction with wound care services by sex

<table>
<thead>
<tr>
<th></th>
<th>Sex</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>t-test for Equality of Means</th>
<th>df</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1</td>
<td>Male</td>
<td>53</td>
<td>3.68</td>
<td>.471</td>
<td>-.220</td>
<td>78</td>
<td>0.826</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>27</td>
<td>3.70</td>
<td>.465</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>Male</td>
<td>53</td>
<td>3.62</td>
<td>.596</td>
<td>-.617</td>
<td>78</td>
<td>0.539</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>27</td>
<td>3.70</td>
<td>.465</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>Male</td>
<td>53</td>
<td>3.64</td>
<td>.591</td>
<td>-2.023</td>
<td>78</td>
<td>0.046</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>27</td>
<td>3.89</td>
<td>.320</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>Male</td>
<td>53</td>
<td>3.85</td>
<td>.496</td>
<td>.637</td>
<td>78</td>
<td>0.526</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>27</td>
<td>3.78</td>
<td>.424</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q5</td>
<td>Male</td>
<td>53</td>
<td>3.72</td>
<td>.601</td>
<td>.090</td>
<td>78</td>
<td>0.929</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>27</td>
<td>3.70</td>
<td>.669</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6</td>
<td>Male</td>
<td>53</td>
<td>3.91</td>
<td>.295</td>
<td>.234</td>
<td>78</td>
<td>0.816</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>27</td>
<td>3.89</td>
<td>.320</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q7</td>
<td>Male</td>
<td>53</td>
<td>3.85</td>
<td>.361</td>
<td>1.169</td>
<td>78</td>
<td>0.246</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>27</td>
<td>3.74</td>
<td>.447</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q8</td>
<td>Male</td>
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<td>.342</td>
<td>.623</td>
<td>78</td>
<td>0.535</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>27</td>
<td>3.81</td>
<td>.396</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

No statistically significant differences between male and female in terms of reported satisfaction with wound care services at Hamad General Hospital.
## Appendix X: Correlations between CSQ-8 and participant characteristics

<table>
<thead>
<tr>
<th>CSQ 8 / Statistics</th>
<th>Gender</th>
<th>Place of birth</th>
<th>Marital status</th>
<th>Level of education</th>
<th>Employment status</th>
<th>Source of wound</th>
<th>Referral source</th>
<th>Level of difficulty getting appointment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Q1</strong> Pearson Correlation</td>
<td>.061</td>
<td>.051</td>
<td>-.032</td>
<td>.011</td>
<td>.072</td>
<td>-.072</td>
<td>-.100</td>
<td>-.023</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.590</td>
<td>.649</td>
<td>.778</td>
<td>.921</td>
<td>.527</td>
<td>.522</td>
<td>.375</td>
<td>.841</td>
</tr>
<tr>
<td>N</td>
<td>81</td>
<td>81</td>
<td>81</td>
<td>81</td>
<td>79</td>
<td>81</td>
<td>81</td>
<td>81</td>
</tr>
<tr>
<td><strong>Q2</strong> Pearson Correlation</td>
<td>.096</td>
<td>.005</td>
<td>.033</td>
<td>-.077</td>
<td>.140</td>
<td>.115</td>
<td>-.360**</td>
<td>-.023</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.392</td>
<td>.968</td>
<td>.773</td>
<td>.495</td>
<td>.220</td>
<td>.309</td>
<td>.001</td>
<td>.657</td>
</tr>
<tr>
<td>N</td>
<td>81</td>
<td>81</td>
<td>81</td>
<td>81</td>
<td>79</td>
<td>81</td>
<td>81</td>
<td>81</td>
</tr>
<tr>
<td><strong>Q3</strong> Pearson Correlation</td>
<td>.220*</td>
<td>-.134</td>
<td>.030</td>
<td>.014</td>
<td>.111</td>
<td>-.071</td>
<td>.068</td>
<td>.012</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.049</td>
<td>.235</td>
<td>.792</td>
<td>.902</td>
<td>.332</td>
<td>.527</td>
<td>.546</td>
<td>.913</td>
</tr>
<tr>
<td>N</td>
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<td>81</td>
<td>81</td>
<td>79</td>
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</tr>
<tr>
<td><strong>Q4</strong> Pearson Correlation</td>
<td>-.039</td>
<td>.218</td>
<td>.042</td>
<td>.003</td>
<td>.064</td>
<td>-.074</td>
<td>.062</td>
<td>.321**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.730</td>
<td>.051</td>
<td>.713</td>
<td>.977</td>
<td>.573</td>
<td>.512</td>
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<td>.003</td>
</tr>
<tr>
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<td>79</td>
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<tr>
<td><strong>Q5</strong> Pearson Correlation</td>
<td>.019</td>
<td>.062</td>
<td>.157</td>
<td>-.045</td>
<td>.039</td>
<td>.199</td>
<td>.064</td>
<td>.108</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.867</td>
<td>.584</td>
<td>.163</td>
<td>.693</td>
<td>.731</td>
<td>.075</td>
<td>.570</td>
<td>.338</td>
</tr>
<tr>
<td>N</td>
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<td>81</td>
<td>81</td>
</tr>
<tr>
<td><strong>Q6</strong> Pearson Correlation</td>
<td>-.003</td>
<td>.002</td>
<td>-.013</td>
<td>-.057</td>
<td>.178</td>
<td>.079</td>
<td>.100</td>
<td>.286**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.980</td>
<td>.983</td>
<td>.908</td>
<td>.616</td>
<td>.117</td>
<td>.483</td>
<td>.375</td>
<td>.010</td>
</tr>
<tr>
<td>N</td>
<td>81</td>
<td>81</td>
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<td>81</td>
<td>79</td>
<td>81</td>
<td>81</td>
<td>81</td>
</tr>
<tr>
<td><strong>Q7</strong> Pearson Correlation</td>
<td>-.083</td>
<td>.022</td>
<td>.042</td>
<td>-.289**</td>
<td>.077</td>
<td>-.018</td>
<td>-.095</td>
<td>.034</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.462</td>
<td>.847</td>
<td>.710</td>
<td>.009</td>
<td>.498</td>
<td>.876</td>
<td>.398</td>
<td>.762</td>
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<tr>
<td><strong>Q8</strong> Pearson Correlation</td>
<td>-.035</td>
<td>.084</td>
<td>.072</td>
<td>-.055</td>
<td>.153</td>
<td>-.067</td>
<td>.126</td>
<td>.085</td>
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<tr>
<td>Sig. (2-tailed)</td>
<td>.758</td>
<td>.458</td>
<td>.523</td>
<td>.623</td>
<td>.178</td>
<td>.551</td>
<td>.263</td>
<td>.450</td>
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</table>

* Correlation is significant at the 0.05 level (2-tailed).

** Correlation is significant at the 0.01 level (2-tailed).